What is claimed is:

1. A method for use in a database system, comprising:

receiving a query that specifies an aggregate on distinct values of at least one attribute, the query further specifying grouping on plural grouping sets, the plural grouping sets having at least a first grouping set and a second grouping set;

identifying distinct values of the at least one attribute and storing the distinct values of the at least one attribute in a first table;

computing aggregates for groups specified by the first grouping set using the first table; and

computing aggregates for groups specified by the second grouping set using the first table.

2. The method of claim 1, wherein the first grouping set is lower level grouping set than the second grouping set.

3. The method of claim 1, wherein identifying the distinct values of the at least one attribute comprises computing a group-by operation on the first grouping set and selecting the attributes of the first grouping set for output.

4. The method of claim 3, wherein storing the distinct values of the at least one attribute in the first able comprises storing the distinct values of the at least one attribute in a spool file.

5. The method of claim 3, further comprising:

using the first table to identify distinct values of the at least one attribute for groups defined by the second grouping set; and

storing the distinct values of the at least one attribute for the groups defined by the second grouping set in a second table.

6. The method of claim 5, wherein computing aggregates for the groups specified by the second grouping set is based on the second table.

7. The method of claim 6, wherein identifying distinct values of the at least one attribute for groups defined by the second grouping set comprises computing a group-by operation on the first able based on the second grouping set and selecting one or more attributes of the second grouping set for output.

8. An article comprising at least one storage medium containing instructions that when executed cause a system to:

receive a query that specifies an aggregate on distinct values of at least one attribute, the query further specifying grouping on plural grouping sets, the plural grouping sets having at least a first grouping set and a second grouping set;

identify distinct values of the at least one attribute and storing the distinct values of the at least one attribute in a first table;

compute aggregates for groups specified by the first grouping set using the first table; and

compute aggregates for groups specified by the second grouping set using the first table.

9. The article of claim 8, wherein the first grouping set is lower level grouping set than the second grouping set.

10. The article of claim 8, wherein identifying the distinct values of the at least one attribute comprises computing a group-by operation on the first grouping set and selecting the attributes of the first grouping set for output.

11. The article of claim 10, wherein storing the distinct values of the at least one attribute in the first able comprises storing the distinct values of the at least one attribute in a spool file.

12. The article of claim 10, wherein the instructions when executed cause the database system to further:

use the first table to identify distinct values of the at least one attribute for groups defined by the second grouping set; and

store the distinct values of the at least one attribute for the groups defined by the second grouping set in a second table.

13. The article of claim 12, wherein computing aggregates for the groups specified by the second grouping set is based on the second table.

14. The article of claim 13, wherein identifying distinct values of the at least one attribute for groups defined by the second grouping set comprises computing a group-by operation on the first able based on the second grouping set and selecting one or more attributes of the second grouping set for output.

15. A database system comprising:

a storage to store a table; and

a controller to:

receive a query that specifies a calculation of an aggregate on distinct values of an attribute in the table, the query to specify group-by operations on plural grouping sets;

in processing the query, compute intermediate values for storage in an intermediate spool; and

use the intermediate values in the intermediate spool for computing results of at least two group-by operations on at least two corresponding grouping sets.

16. The database system of claim 15, wherein the query comprises a Structured Query Language (SQL) SELECT statement containing a GROUP BY clause specifying multiple grouping sets.

17. The database system of claim 15, wherein the query specifies group-by operations on plural grouping sets at multiple grouping levels.

18. The database system of claim 15, wherein the controller comprises database management software.

19. The database system of claim 18, wherein the database management software comprises plural access modules, and the storage comprises plural storage modules accessible by the plural access modules in parallel.

20. The database system of claim 19, further comprising plural processors, the access modules executable on the processors.